

REMARKS/ARGUMENTS

Claims 78, 79, 83, and 84 have been amended and Claims 81, 82 and 87-96 have been canceled without intending to abandon or to dedicate to the public any patentable subject matter. Claims 97-104 have been added. Accordingly, Claims 78-80, 82-86, and 97-104 are currently pending in the current application.

The Examiner objects to Claims 79, 80, 87-89, and 95 for various informalities. Claim 79 has been amended per the Examiner's suggestion and Claims 87-96 have been canceled. Therefore, the objections to Claim 79, 80, 87-89, and 95 should be reconsidered and withdrawn.

The Examiner rejects Claim 92 under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement. However, Claim 92 has been and the rejection is therefore moot.

The Examiner rejects Claims 78, 81, and 84-86 under 35 U.S.C. §102 as being anticipated by Lucas et al. (U.S. 6,834,264); Claims 79, 80, 82, and 83 under 35 U.S.C. §103(a) as being unpatentable over Lucas et al. in view of De Armas et al. (U.S. 5,873,064); Claims 87-91 and 93-96 under 35 U.S.C. §103(a) as being unpatentable over Johnson (U.S. 5,835,571) in view of Davis (U.S. 6,816,837); and Claim 92 under 35 U.S.C. §103(a) as being unpatentable over Johnson in view of Davis and further in view of Maes (U.S. 6,477,500).

The cited references fail to teach or suggest at least the following italicized features of each independent claim:

78. A method of accessing information on a network, comprising:
receiving, from a user, *a first voice command associated with a first macroinstruction;*
in response to receiving the first voice command, thereafter prompting the user for *a second voice command associated with a second macroinstruction, wherein the first and second macroinstructions are different, and wherein the second macroinstruction is embedded within the first macroinstruction such that the first macroinstruction provides a layer of security to the second macroinstruction whereby access to the second macroinstruction is restricted unless the first voice command is received;*
thereafter receiving, from the user, the second voice command associated with the second macroinstruction; and
in response to receiving the second voice command, executing the second macroinstruction.

98. A system for accessing information on a network, comprising:
a voice server, comprising:
a voice agent operable to configure a first and second voice command, wherein a first macroinstruction corresponds to the first voice command and wherein a second macroinstruction corresponds to the second voice command, wherein the second voice command is embedded within the first voice command such that the first voice command provides a layer of security to the second voice command whereby access to the second voice command and the second macroinstruction is restricted unless the first voice command is received;
a voice portal component operable to detect and compare voice signal patterns to predetermined voice signal patterns associated with the first and second voice commands; and
a processor operable to determine that the first voice command has been received and in response to receiving the first voice command generate a prompt for the second voice command, and determine that the second voice command has been received and in response to receiving the second voice command execute at least the second macroinstruction.

In one embodiment, the present invention is directed to a voice portal that uses voice macros to invoke a number of discrete voice commands by speaking the word or phrase corresponding to the voice macro. In one configuration, the voice portal first determines whether a spoken word or phrase matches one or more sets of macroinstructions in the macrolibrary and second, if the word or phrase is not in the macrolibrary, processes the spoken word or phrase as a nonmacroinstruction. A macroinstruction or macrostatement or set of macroinstructions or macrostatements is an executable instruction or set of executable instructions that represents and/or is associated with one or more other executable instructions while a "nonmacroinstruction" is an executable instruction or a set of executable instructions that do not qualify as a macroinstruction or set of macroinstructions. For example, a macroinstruction is often composed of a number of nonmacroinstructions. By first determining if the word or phrase is in the macrolibrary and then processing the voice command as a nonmacroinstruction, the voice agent prevents system conflicts where a word or phrase references both macro- and nonmacroinstructions. It also permits a macroinstruction to be invoked by the same word or phrase as an embedded macroinstruction and/or nonmacroinstruction. In another configuration, the voice portal, when a macroinstruction is named by a user, executes the instructions corresponding to the macroinstruction simultaneously or substantially simultaneously. In still another configuration, nested macroinstructions are instituted to increase the security associated with a particular macroinstruction. In a further configuration, the creation of macroinstructions can be tailored such that a public or private macroinstruction can be created, further adding to the security of a particular macroinstruction or set of macroinstructions.

Lucas, et al.

Lucas, et al., is directed to a multiple documents including multiple fields produced using a voice recognition engine to transcribe dictated notes. An embodiment of an apparatus to generate documents from a user's dictation may include a computer interface and a computer in communication with the computer interface including a voice recognition engine, a database, and a memory. A method of entry of dictation into a plurality of documents may include receiving an indication of a selection of a plurality of documents from a list of documents, receiving an indication of a field descriptor of a first field in a document, receiving dictated speech to be entered into the first field, writing transcribed text representative of the dictated speech to the first field, and writing the transcribed text to other fields having the same descriptor in each of the other selected plurality of documents.

When the system encounters a macro, it substitutes the string of text corresponding to the macro into the text file that is generated by the voice recognition engine. The method of inserting a macro into a string of words in a text file may include: correlating the string of words against entries in a database of command strings; copying, upon identity of correlation, the macro at a pointer address of the command string; and replacing the correlated string of words with the copied macro. The user may indicate to the system that the user's next word will be a macro. In an embodiment of the invention, the user may indicate that the next word is a macro by saying the word "sub" followed by the name of the macro. Thus, a physician may say "sub thanks" and the system may generate the following: "Thank you for referring the above-identified patient to our offices."

A variable macro combines a macro with a data variable retrieved from a database. Thus, a user may say "sub thanks" and the system may generate the following: "Thank you for referring [PATIENT NAME] to our offices." Where [PATIENT NAME] is a data field and the instance of [PATIENT NAME] to be substituted in the example above would be defined by the selection of an entity from the entity list 12 at the beginning of the dictation session. Thus, if the entity were named "John Brown" the actual text generated by the system would be: "Thank you for referring John Brown to our offices."

A prompted macro allows a user to generate text that requires the insertion of variables that may not be present in the patient demographic database 51. In an embodiment, the prompted macro is used as follows. The physician says "sub macro_name," waits for a prompt from the system such as a beep, and then says or enters the variable data. Thus, as an example, if a patient had taken a lead blood level test and the result of 5 deciliters/liter was returned to the physician, the physician may say "sub high lead," wait for a beep, and then say "five." The system in turn may generate the following text: "The results of your lead blood screening indicate a level of 5 deciliters/liter. This level is higher than would normally be expected."

Lucas et al., does not teach the use of embedded macros for security, as claimed in claim 78. Both the variable and prompted macros retrieve a variable to populate a field in a macroinstruction. They do not condition the performance of the macro on the user speaking a second voice command.

De Armas, et al.

De Armas, et al., is directed to a method for implementing a multi-action voice macro (140) for a voice recognition navigator program (102) on a computer system. The method involves analyzing a target application program (22) to determine a plurality of target application states (24). Each of the target application states (24) is comprised of a plurality of window objects. The target application states are arranged in the form of one or more sub-context trees, with each of the sub-context trees comprised of a plurality of sub-context objects (50, 52, 54, 56, 58, 60, 62, 64, 66, 68). A set of user inputs is determined to which each of the window objects will be responsive. Each user input is assigned a corresponding voice macro (140) which simulates the user inputs in response to a spoken utterance. The voice macro (140) includes a link field (148), which identifies at least one linked macro to be executed by the navigator program (102) when a specific vocabulary phrase for the voice macro (140) is spoken by a user.

The voice macro preferably includes a direct action field and a link field. The direct action field defines a direct action which is to be performed in response to a spoken command corresponding to the vocabulary phrase for the voice macro. If additional actions are to be performed beyond those specified in the direct action field, then the link field identifies at least one linked macro which is also to be executed by the navigator program when the vocabulary word or phrase for the voice macro is spoken by a user.

De Armas, et al., does not teach the use of embedded macros for security. Although it does teach embedded macros generally, the embedded macro is performed when the principal

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macro is activated by spoken command. The performance of the embedded macro is not contingent upon the user speaking both the first and second voice commands or macro names.

The dependent claims provide additional reasons for allowance. As an example, Claims 79 and 99 include a first macroinstruction that references a third voice command having a corresponding third instruction where the corresponding third instruction is associated with at least one item of work that can be performed in response to the first and second voice commands and not the third voice command.

As another example, Claims 83, 84, and 101-103 include various options for performing a second macroinstruction in combination with a first macroinstruction.

Based upon the foregoing, Applicant believes that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,
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